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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,253	08/28/2002	Scott Hetherton	MP1705-US3	9293

7590 01/26/2004
Marguerite E Gerstner
Tyco Electronics Corporation
Intellectual Property Law Department
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Menlo Park, CA 94025-1164

EXAMINER

EASTHOM, KARL D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 01/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,253

Applicant(s)

HETHERTON ET AL.

Examiner

Karl D Easthom

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 and 21-34 is/are pending in the application.
- 4a) Of the above claim(s) 1-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-19 and 21-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Chiang et al.

Chiang et al. discloses the claimed invention at Fig. 6 with first and second laminates 11,12, plurality of transverse conductive members 51, and conductive surfaces with patterns, 13, 35, 15,

49. For claim 19, with two devices, the internal laminar members are 13, 35 on each of the laminates, with the external laminar members the other four 15, 49 on the other two laminates.

In claim 20, the insulating polymer is 53. The apertures are 51, 31, with transverse conductive members as noted. The element 54 is part of the transverse conductive members and is seen at the edge, or slightly extending into the apertures in Fig.9, meeting the limitation of lying within since it helps to define the aperture.

3. Claims 18 and 21-33 are rejected under 35 U.S.C. 102(e) as being anticipated by Barrett. '591. Barrett. discloses the claimed invention at Figs. 8, 11 with first and second laminates 14,19, plurality of transverse conductive members 36, and conductive surfaces with patterns, 34a, 32a, 32d, 34d. Or the conductive surfaces are where the laminates meet the patterns. For claim 19, the internal laminar members are 32c, 34c, 32b, 34b on each of the

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laminates. The apertures are surrounded by the transverse conductive members 36, 36. The two conductive surfaces are, for example, at Fig. 11, where laminate 19 has a patterned conductive surface where it meets electrodes 32c, and another one where it meets 32d. In claims 21-22, the laminates comprise are PTC polymers. In claims 23-24, the polymer compositions can be the same or different, where at col. 7, lines 1-20, they are described as first and second layers having any suitable compositions. In claim 26, foils are the electrodes and are part of the laminate. In claims 25 and 27, element 38 is a insulating polymeric material meeting the claim, where it is part of the laminate 14 for claim 25, similar to the foil. In claim 28 the patterns are different from one layer to the next as seen at Fig. 9. In claim 29, see 52a. In claims 30-31, the markings are by way of the apertures which provide some indication of where to subdivide and also the slot 28, see Fig. 6 and apertures 36 and markings 29. In claim 32 there are more than one laminar elements. In claim 33, the middle element 18 is an adhesive where it adheres to the other two devices. In claim 34, there are at least two transverse members, see 54a, and 54b at Fig. 13.

4. Applicant's arguments filed 12/1/03 have been fully considered but they are not persuasive as to the repeated rejections. (However the support in the parent CIP application 098/395869 overcoming the mention to Li et al. is persuasive, and the showing based upon the application copy is acknowledged and appreciated). For claim 19, applicant argues that Chang does not disclose the aperture running from the first external electrode to the second external electrode and through both PTC devices. This is not correct, the aperture runs through both PTC devices as seen at Fig. 5. The aperture may widen at the gap between the devices, but it still exists there, since an aperture is an opening. Further, the conductive element 54 serves to close

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the aperture to an extent. For claim 18, applicant argues that the laminates of Barrett do not have two conductive surfaces. This is not correct. For example, at Fig. 11 laminate 19 has a patterned conductive surface where it meets electrodes 32c, and another one where it meets 32d.

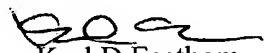
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Karl D Easthom whose telephone number is 703 308-3306. The examiner can normally be reached on M-Th, 5:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 703 308-1976. The fax phone number for the organization where this application or proceeding is assigned is 703 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308-0956.


Karl D Easthom
Primary Examiner
Art Unit 2832

KDE